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Clinical Image

Invasive cranial chondrosarcoma

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Sir,

Chondrosarcoma is a malignant tumor of cartilaginous structures that generally affects the epiphyses of long bones. Cranial location is rare (due to persistence of cartilaginous residues) and constitutes less than 10% of cases. It then reaches the spheno-temporal, spheno-occipital and temporo-occipital synchondroses [1].

Through this work, we propose to study the therapeutic particularities of this location.

We report the case of a 17-year-old young man, with no previous history, who initially consulted for left retro-auricular swelling. The neurological examination was normal. CT showed an extra cranial centimeter cystic lesion developing at the expense of the external table of the temporo-occipital synchondrosis. A cytopuncture was first done followed by incomplete tumor excision.

The pathological study concluded that it was a grade I chondrosarcoma. The evolution was marked by the recurrence of the lesion 3 months postoperatively (Fig. 1) requiring re-operation. Radiotherapy treatment at a dose of 50 Gy was attempted. The patient recurred twice more, requiring as many surgical procedures including a partial craniectomy. After 4 months of the last recovery, he consulted again for headaches and dizziness with mixed cerebellar syndrome on examination.

At this time, the tumor invaded the left parietal and cerebellar brain parenchyma and became inextirpable.

The patient died 02 months later.

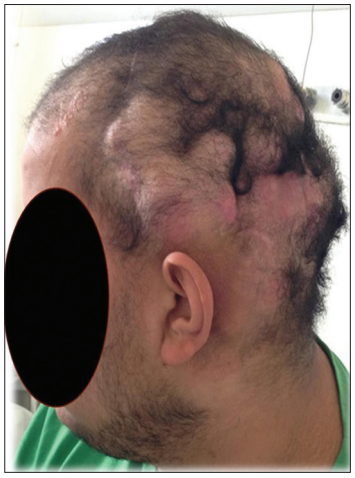

Figure 1: Cranial swellings after two years of evolution.

Chondrosarcomas are the second most common malignant bone tumors (after osteosarcoma). They preferentially reach the epiphyses of the long bones [2]. They represent only 6% of skull base tumors. 80% are conventional type (grade I, II and III) but they can also be undifferentiated, mesenchymal, periosteal or clear cell [3].

They can be seen on healthy bone (primary) or from a chondroma (secondary). Their malignancy is mainly linked to their high local invasive potential but they can also metastasize distantly (lung) [3].

They peak in frequency around the age of 50-60 with a slight predominance in males.

The most common reasons for consultation are diplopia and headaches [1].

These are tumors with a high potential for recurrence. The histological type and grade as well as therapeutic management are the main parameters to consider

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assessing this risk. Adequate therapeutic management is necessary to improve the prognosis.

Our observation reflects non-optimal management. In fact, it is necessary to require a complete excision passing through a healthy area because any minimum procedure (simple tumor excision, curettage) will lead to tumor recurrence (93%).

Additional radiotherapy in necessary cases (Grade III or mesenchymal type or in the event of recurrence of grade I or II) must be done at a minimum dose of 60 Gy and not 50 Gy as was the case of our patient because the tumor is radio-resistant below this dose [1,3].

Chemotherapy (cyclophosphamide, etoposide, doxorubicin and vincristine) will only find its place in the management of mesenchymal and undifferentiated chondrosarcomas [2].

Consent

The examination of the patient was conducted according to the principles of the Declaration of Helsinki.

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